Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for attenuating expression of a target gene in a mammalian cells, comprising introducing a ~~double-stranded RNA (dsRNA)~~ hairpin RNA into the mammalian cells in an amount sufficient to attenuate expression of the target gene, wherein the ~~dsRNA comprises a complementary nucleotide sequence of 20-50 nucleotides~~ hairpin RNA:

(i) is a single nucleic acid strand having a double stranded portion including first nucleotide sequence that hybridizes under stringent ~~conditions~~ wash conditions of 0.2 x SSC at 65 °C to a portion of the target gene, and a second nucleotide sequence which is a complementary inverted repeat of said first nucleotide sequence and hybridizes to said first nucleotide sequence to form a hairpin structure;

(ii) is a substrate for cleavage by an RNaseIII enzyme to produce a double-stranded RNA product,

(iii) does not produce a general sequence-independent killing of the mammalian cells, and

(iv) reduces expression of said target gene in a manner dependent on the sequence of said double stranded portion of the hairpin RNA.

2. (Canceled)

3. (Currently amended) The method of claim 1, wherein the mammalian cells are ~~is~~ suspended in culture.

4. (Currently amended) The method of claim 1, wherein the mammalian cells are present ~~is~~ in a whole animal~~, such as a non-human mammal~~.

5-8. (Canceled)

9. (Currently amended) The method of claim 1, wherein the target gene is a genomic gene of the mammalian cells.

10. (Currently amended) The method of claim 1, wherein the target gene is an heterologous gene relative to the genome of the mammalian cells~~, such as a pathogen gene~~.

11. (Canceled)

12. (Currently amended) The method of claim 1, wherein the mammalian cells are ~~is a~~ primate cells.

13. (Currently amended) The method of claim 1, wherein the ~~dsRNA~~ double stranded portion of the hairpin RNA is ~~about~~ at least 20 nucleotides in length.

14. (Currently amended) The method of claim 12, wherein the mammalian cells are ~~is a~~ human cells.

15. (Currently amended) The method of claim 1, wherein expression of the target gene is attenuated by at least ~~10~~ 5 fold.

16-25. (Canceled)

26. (Currently Amended) The method of claim 1, wherein the ~~dsRNA~~ hairpin RNA is produced by a vector in the mammalian cells.

27. (Canceled)

28. (Currently amended) The method of claim 1, wherein the ~~dsRNA~~ hairpin RNA ~~is selected to avoid~~ does not cause activation of a protein kinase RNA-activated (PKR) sequence-independent response in the mammalian cells.

29-42. (Canceled)

43. (New) The method of claim 1, wherein the hairpin RNA is introduced into the mammalian cells by transfection.

44. (New) The method of claim 43, wherein the transfection is mediated by calcium precipitating agents.

45. (New) The method of claim 43, wherein the transfection is mediated by lipid carrier agents.

46. (New) The method of claim 1, wherein the hairpin RNA is chemically synthesized.

47. (New) The method of claim 1, wherein the RNaseIII enzyme is dicer.

48. (New) A method for attenuating expression of a target gene in mammalian cells, comprising introducing a hairpin RNA into the mammalian cells in an amount sufficient to attenuate expression of the target gene, wherein the hairpin RNA:

(i) is a single nucleic acid strand having a double stranded portion including first nucleotide sequence of the target gene, and a second nucleotide sequence which is a complementary inverted repeat of said first nucleotide sequence and hybridizes to said first nucleotide sequence to form a hairpin structure;

(ii) is a substrate for cleavage by an RNaseIII enzyme to produce a double-stranded RNA product,

(iii) does not produce a general sequence-independent killing of the mammalian cells, and

(iv) reduces expression of said target gene in a manner dependent on the sequence of said double stranded portion of the hairpin RNA.